

19. HOUSE SPARROWS (*PASSER DOMESTICUS* LINN.) AS PREDATORS OF ARMY WORM *MYTHIMNA SEPARATA* (WALKER) INFESTING WHEAT AT LUDHIANA (PUNJAB)

A good stand of wheat of var. PBW 52 with a row of eucalyptus and poplar on a footpath at the eastern edge of the field had an outbreak of army worm, (*Mythimna separata* (Walker), especially in the shady part of the late sown wheat cultivar which was harvested by mid May. The whole field was seen covered with faecal pellets of the larvae on the ground. There was a good population of the larvae feeding on the wheat ears, especially awns.

On 23 April 1984, at about 1000 hrs, flocks of house sparrows (*Passer domesticus* Linn.) were observed flying to and fro between the wheat fields and the eucalyptus/poplar plantation. It was thought that the sparrows were feeding on wheat ears, as they are reported to be pests of wheat (Anonymous 1986). However, on critical examination, it was found that each sparrow was carrying a single larva in its beak, with the larva held almost in the centre. This observation was confirmed many times in the same field during the same month. Sparrows are already recorded as being insectivorous, feeding on *Heliothis*

armigera infesting *Dolichos lablab* (Verghese and Subramanya 1985), and on peach leaf curl aphid (Mann 1987). According to available literature, it appeared to be a new record of sparrow feeding on the army worm.

Information on sparrows in insect suppression in an agroecosystem is meagre and therefore these birds are not recognised as bioagents in biological control projects/programmes. More and effectively planned research is needed to ascertain the role of birds in suppression of particular insect species.

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20. SOUTHERN WINTERING RANGE OF SOME WATERBIRDS

The wetlands of Pondicherry region harbour important populations of waterbirds. The region also provided, during the 1986-87 winter, some interesting bird records. We have considered only those species which showed a regular presence throughout the winter, and which therefore cannot be regarded as occasional sightings of stray individuals. The earliest and latest dates on which each species was seen are shown after its name.

Two important tanks are located in the area studied:

- Ousteri, 10 km west of Pondicherry and approximately 8 sq.km in area, is an artificial, temporary freshwater tank.
- Kaliveli, 20 km north of Pondicherry in South Arcot district of Tamil Nadu and approximately 75 sq.km, is a natural lake connected with the Bay of Bengal by a narrow channel. Its water turns brackish after the withdrawal of the north-east monsoon; the lake dries up in summer.

White Stork (*Ciconia ciconia*): 11 Nov - 14 April

The wintering ground of this species is not clear, and a specific appeal for sightings was launched last winter by the B.N.H.S. (*Hornbill* 1985(3): 40). It gave mainly qualitative results, but no clue to important concentrations (Serrao 1986). This stork is also said to be less common in south India than in the north (Ali & Ripley 1983 : 25). Nevertheless, Johnson (1984) has recorded one flock of over 360 birds in Tamil Nadu; however, it has not been observed whether this large concentration wintered there.

Over 300 birds of this species have been wintering in Kaliveli and Ousteri, the highest number recorded being 340. Eighty were already present by mid-November, when the lakes started filling, and 140 remained up to 10th April. Even on the occasions when more than 100 birds could be very accurately identified, not even a single individual of the eastern subspecies *C. c. boyciana* could be observed.

Greater Spotted Eagle (*Aquila clanga*): 25 Nov – 18 March.

It is regarded that this species has not been reported recently from the Malabar and Carnatic coasts, where it used to be common. One specimen taken in North Karnataka in 1941 was perhaps the latest southern record of this species (Ali & Ripley 1983 : 70). Three Greater Spotted Eagles spent the 1986-87 winter in Kaliveli. Various close sights of the birds through a spotting scope, both in flight and on the ground, allowed us to establish definitely the specific identity of the birds, which included at least one adult and one juvenile.

Common Pochard (*Aythya ferina*) and Tufted Duck (*A. fuligula*): 19 Nov – 14 Jan & 19 Nov – 18 Feb.

Both these ducks are known to be rare or irregular in south India, down to Karnataka, where, however, the former is not uncommon in some years (Ali & Ripley, 1983 : 46-47). They do not seem to have been recorded from Point Calimere (Sugathan 1982). These two species wintered in large numbers in Ousteri tank, the maximum count being 600 for the former and 800 for the latter.

Ruddy Shelduck (*Tadorna ferruginea*): 25 Nov – 28 Feb.

The same applies to this species, which wintered in Kaliveli in smaller numbers (upto 30). This seems to be a regular feature (Pieter, *pers. comm.*)

Blacktailed Godwit (*Limosa limosa*): 18 Dec – 25 March.

It is now well established that this wader is no longer rare in the South: it is common in Point Calimere (Sugathan 1982), and in Sri Lanka (Hoffmann 1982). Our study provides further evidence that the species is now common in the south, with flocks numbering up to 90.

The above records show a southward extension of the wintering range of some species. But how regular is this distribution?

Previous observations by Pieter (*pers. com.*) seem to indicate a regular presence of White Storks, though in lesser numbers, of Ruddy Shelduck and perhaps of Spotted Eagle. In addition, it is quite possible that the local conditions in some traditional wintering places (droughts in Bharatpur, for example) may sometimes force some species to winter further south than usual (V S Vijayan, *pers. comm.*). The episodic abundance of the Redcrested Pochard (*Netta rufina*) in south India is already known (Ali & Ripley 1983 : 45), and might be due to such reasons. This species wintered in Kaliveli (upto 110), and the winter distribution of other species might follow the same pattern.

A recent extension of the wintering range cannot be ruled out for some species, as it now seems established for the Blacktailed Godwit. Finally, due to the lack of observers and of spotting scopes, some species may have remained under-recorded in south India up to now.

Further observations in the years to come are necessary before definitely concluding on the status of these species in the south. But the regular presence during one complete winter of a huge flock of White Storks, of Greater Spotted Eagles thought to have completely disappeared from South India due to "altering ecological conditions" (Ali & Ripley 1983 : 70), and the abundance of more common waterbirds (tens of thousands), are a clear indication of Kaliveli and Ousteri having a rich ecological potential. It might be found that several species reach there their southernmost winter limit.

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21. TWINNING ABNORMALITY IN *GAVIALIS GANGETICUS* (REPTILIA, CROCODILIA)

Singh and Tandan (1978) and Subba Rao and Bustard (1979) have recorded congenital blindness in *Gavialis gangeticus*. Besides blindness, eleven other developmental abnormalities have been recorded for the species by

Singh and Bustard (1982). In the present note we put on record the occurrence of twinning abnormality that has not been reported earlier.